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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,980	01/25/2002	Francois Beck	SCHN:016	8782

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ALEXANDRIA, VA 22314-2805

EXAMINER

PATEL, RAMESH B

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,980

Applicant(s)

BECK ET AL.

Examiner

Ramesh B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-9 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 7/25/2001 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement being considered by the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show figures shows foreign language characters as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because the abstract contains the term "The invention relates to..." and "FIGURE 1" and Title of The Invention at the top of the page 39, which are not appropriate for the language for the abstract. Correction is required. See MPEP § 608.01(b).

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5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the definition" and "the physical location..." and "the defined structured type object" and "the complete topological address". There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 1-7, the phrase "or the like" and/or "structured type" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Regarding claim 2, the phrase "such as" and/or "so that" render the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 2 recites the limitation "the application program designer". There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 3, the word "means" is preceded by the word(s) "interpretation" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Dependent claims, which are not particularly rejected, are rejected based on the rejected base claim. The applicant is requested to review all claims and make appropriate correction as required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Alvarez-Escurra et al. (US Patent 5,923,903).

As to claim 1, Alvarez-Escurra teaches the invention including process for programming an automation application program on an automation equipment programming station that comprises: a step to define a plurality of structured objects (1.10, 1.20) each representing an input-output channel of an input-output module of the automation equipment (see, abstract and figures 2B-2C); the definition of each structured including at least one characteristic element (1.11) corresponding to input-output information exchanged between the input-output module and the application program, and the relative topological address of the input-output information for each element (see, abstract and col. 3, lines 13-42); a step to write an application program (10), declaring symbolic input-output variables (100) of the application program (10) as an instance of a previously defined structured object (see, figures 2B-7C and col. 2, lines 7-27); and a step to configure symbolic input-output variables comprising a definition of the physical location of each input-output module of the automation equipment associated with the symbolic input-output variables (100) of the application program (see, abstract and col. 3, lines 13-42 and col. 5, lines 18-39), a step (40) to automatically interpret the application program to execute it on the automation equipment, comprising a step to replace symbolic input-output variables (100) in the application program (10) by the complete topological address (200) of the corresponding input-output information (see, abstract and figures 2B-7C and col. 3, lines 35-57).

As to claim 2, Alvarez-Escurra teaches the process characterized in that each symbolic variable (100) of the program comprises two fields, a first field (101) composed of a character string chosen by an application program designer, to a structured object which can be made to correspond with the symbolic variable (100), and a second field (102) composed of an identification of an element of the structured object associated with the symbolic variable (100) (see, abstract and figures 2B-7C).

As to claim 3, Alvarez-Escurra teaches the process characterized in that the replacement step comprises: a step (34) to search for the relative address defined for each structured element in a table (1.1, 1.2) of elements of a structured object stored on the programming station, a step (32) to search in a configuration table for the physical location declared for each module that the designer has associated with symbolic input-output variables (100) of the application program, a step (33, 35) to construct the exact topological address of each symbolic variable (100) of the application program, using interpretation on the programming station, starting from the relative address and the physical location found (see, abstract and figures 2B-7C and col. 2, lines 7-26).

As to claim 6, Alvarez-Escurra teaches the process characterized in that the process comprises a step to configure input-output modules comprising a step to select a commercial reference of an input-output module, and assignment of the selected input-output module to a determined physical location, the interpretation step then including a step to check that the input-output module selected at a determined physical

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location is compatible with the structured type object configured at the same physical location (see, abstract and figures 2B-7C).

As to claim 7, Alvarez-Escurra teaches Programming station for programming automation equipment comprising means of memorization and display (see, col. 3, lines 8-42), and means of interaction with a designer of an automation application program (10) (see, abstract and figures 2B-7C), characterized in that the programming station comprises an editor of symbolic variables (100) to generate a configuration table (6) stored on the memory means (see, abstract and col. 3, lines 8-42), the programming station also includes several tables (1.1, 1.2) of structured object elements stored on the memory means, and means of interpreting an application program (10) comprising at least one symbolic variable (100) defined by the designer using the editor (see, abstract and figures 2B-7C and col. 2, lines 7-26).

As to claim 8, Alvarez-Escurra teaches the programming station characterized in that it comprises means of compiling the application program interpreted by interpretation means to transform the interpreted application program into an automation application that can be executed on an automation equipment (see, abstract and col. 2, lines 7-26).

As to claim 9, Alvarez-Escurra teaches the programming station characterized in that it comprises means of transferring the executable automation application onto

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either portable memory means compatible with the automation equipment, or directly onto the memory means of the automation equipment (see, abstract and figures 2B-7C).

9. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior art of the record fails to teach or fairly suggest in combination with the other elements and features of the claimed invention regarding claim 4, the process wherein the step to define structured objects comprises a step to create a table (1.1, 1.2) of structured type object elements comprising a first column containing at least one identification of a characteristic data of the structured object, a second column containing the elementary data (EDT) and a third column containing the relative address of the data, and then memorizing this table in portable memory means, for each structured object and regarding claim 5, the process wherein the table (1.1, 1.2) of structured object elements comprises a fourth column containing a description of the data, and a fifth column containing read or write rights for each data.


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 703-308-6673. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 708-308-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ramesh B. Patel
Primary Examiner 5/11/04
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